

DERWENT-ACC-NO: 2001-594992  
DERWENT-WEEK: 200167  
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TITLE: Three-dimensional object representation generating  
method for computer  
aided design, involves modifying object representation and  
stored visibility  
attributes based on new data elements and new visibility  
attributes

INVENTOR: ALLEN, P K; REED, M K

PATENT-ASSIGNEE: UNIV COLUMBIA NEW YORK[UYCO]

PRIORITY-DATA: 1997US-064906P (November 7, 1997) ,  
1997US-0979221 (November 26,  
1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES	MAIN-IPC	
US <u>6249600</u> B1	June 19, 2001	N/A
019	G06K 009/00	

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
US 6249600B1	Provisional	1997US-064906P
November 7, 1997		
US 6249600B1	N/A	1997US-0979221
November 26, 1997		

INT-CL (IPC): G06K009/00

ABSTRACTED-PUB-NO: US 6249600B  
BASIC-ABSTRACT: NOVELTY - Target area on object is selected  
based on visibility  
attributes associated with data elements generated by  
scanning object. Object  
indication and stored visibility attributes are modified  
based on new data  
elements and new visibility attributes generated by  
scanning target area.  
Target area selection, scanning and object representation  
and visibility

attribute modification are repeated until termination.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for three-dimensional representation generating system.

USE - For computer aided design, rapid prototyping, advanced structural analysis and process planning operation.

ADVANTAGE - Minimizes the number of scans required to create high quality representation of object at desired resolution. Ensures that entire object is included in the model and outside edges are not cutoff due to the resolution of scanner. Eliminates portions of representation not corresponding to actual image. Increases manufacturing speed by manufacturing multiple items simultaneously using copies of same three-dimensional representation.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of steps for creating three-dimensional representation.

CHOSEN-DRAWING: Dwg.1/13

TITLE-TERMS:

THREE DIMENSION OBJECT REPRESENT GENERATE METHOD COMPUTER  
AID DESIGN MODIFIED  
OBJECT REPRESENT STORAGE VISIBLE ATTRIBUTE BASED NEW DATA  
ELEMENT NEW VISIBLE  
ATTRIBUTE

DERWENT-CLASS: T01

EPI-CODES: T01-J10C4;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2001-443318